

ABSTRACT OF THE DISCLOSURE

The movement position of the roughing tool is calculated, in S109, by adding the finishing allowance to the movement position of the finishing tool so that the path of the roughing tool is shifted in the direction perpendicular to the rotation center axis of the main spindle rotation motor from the path of the finishing tool by the finishing allowance. Then, a gap between the movement position of the roughing tool in the direction of the rotation center axis of the main spindle rotation motor and the workpiece W is calculated, and when the gap is not larger than a predetermined value G, in S113, the movement position of the roughing tool is corrected in the direction perpendicular to the rotation center axis of the main spindle rotation motor so that the roughing tool does not cut in the inside of the finishing portion of the workpiece. The movement position of the roughing tool is corrected so that the movement speed of the roughing tool in the direction perpendicular to the rotation center axis of the main spindle rotation motor is a predetermined value.